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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,426

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Hajime Adachi

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EXAMINER

WELCH, DAVID T

ART UNIT

PAPER NUMBER

2628

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12/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,426	Applicant(s) ADACHI ET AL.	
	Examiner DAVID T. WELCH	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 19, 25 and 27-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 19, 25 and 27-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 21, 2009 has been entered.

Response to Amendments

2. Applicant's amendments filed on September 21, 2009 have been entered. Claims 13, 19, and 25 have been amended. Claims 9, 11, 12, 14, 15, 17, 18, 20, 21, 23, 24, and 26 have been canceled. Claims 27-38 have been added. Claims 13, 19, 25, and 27-38 are still pending in this application, with claims 27, 31, and 35 being independent.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 19 and 31-34 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent¹ and recent Federal Circuit decisions² indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or

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thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example the claims do not recite the extracting or creating as being performed by a processor of a computing device.

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 13, 27, 28, 19, 31, 32, 25, 35, and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Senda et al (U.S. Patent Application Publication No. 2004/0176908), referred herein as Senda.

Regarding claim 27, Senda teaches a three-dimensional (3D) road object creating device, comprising: a cross-section data extracting unit that extracts cross-section data that includes at least width and height of a 3D road object to be drawn; a length information extracting unit that extracts, from a road network database that stores information on length of the 3D road object, length information necessary for drawing the 3D road object (page 3, paragraph 48, lines 1-8; paragraph 49; paragraph 50, lines

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1-8; it is noted that the height disclosed by Senda is analogous to the claimed length); and a creating unit that creates, based on the cross-section data and the length information, the 3D road object having a size obtained by extending the cross-section data in a longitudinal direction of the 3D road object by a length specified by the length information (page 3, paragraph 52, lines 1-14; page 5, paragraph 67; paragraph 68, lines 1-5; paragraph 72, lines 1-13; it is again noted that the height disclosed by Senda is analogous to the claimed length).

Regarding claim 28, Senda teaches the 3D road object creating device according to claim 27, and further teaches the device, wherein the 3D road object corresponds to at least a part of road data stored in the road network database (page 3, paragraph 49; page 5, paragraph 72, lines 1-13).

Regarding claim 13, Senda teaches the 3D road object creating device according to claim 27, and further teaches the device, further comprising a texture extracting unit that extracts texture information including information on a texture drawn on an arbitrary surface of the 3D road object, information on a drawing cycle of the texture, and information on a representative color of the arbitrary surface, from the 3D road object (page 3, paragraph 50, lines 8-11; paragraph 53, lines 1-5; paragraph 54; page 5, paragraph 78, lines 1-10; page 6, paragraph 81, lines 3-4), wherein the creating unit creates the 3D road object based on the texture information (page 5, paragraph 72).

Regarding claims 31, 32, and 19, the limitations of these claims correspond to the limitations of claims 27, 28, and 13, respectively; thus they are rejected on the same grounds as claims 27, 28, and 13, respectively.

Regarding claims 35, 36, and 25, the limitations of these claims correspond to the limitations of claims 27, 28, and 13, respectively; thus they are rejected on the same grounds as claims 27, 28, and 13, respectively.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 29, 30, 33, 34, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Senda, in view of Sakamoto et al. (U.S. Patent Application Publication No. 2002/0070934), referred herein as Sakamoto.

Regarding claim 29, Senda teaches the 3D road object creating device according to claim 28, and further teaches the device, further comprising a selecting unit that selects cross-section data necessary for drawing the 3D road object from among various types of cross-section data for different cross-sections (page 3, paragraph 54, lines 1-8; page 5, paragraph 72). Senda does not explicitly teach the device, wherein the data is selected based on identification information included in the road data. Sakamoto teaches a three-dimensional map display device, comprising extracting units that extract road object information comprising cross section data (width and height data) of a road object and length information extracted from a road network database, and further comprising a creating unit that creates the 3D road object based on the extracted information (page 8, paragraph 183, lines 3-6; paragraph 184, lines 4-10; page 9, paragraph 192, lines 1-5; page 10, paragraph 193, lines 1-9; page 12, paragraph 214; page 14, paragraph 258, lines 4-8; paragraph 260, 261, 265, and 268),

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wherein the 3D road object information is selected based on identification information included in the road data (page 9, paragraph 189, the last 4 lines; paragraph 192, lines 5-9 and 24-29; page 10, paragraph 199, lines 11-17). As taught by Sakamoto, this identification information facilitates faster processing and increases the accuracy of the 3D representation. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the identification information of Sakamoto with the invention disclosed by Senda.

Regarding claim 30, Senda teaches the 3D road object creating device according to claim 27, and further teaches the device, wherein the length information is length information included in the road network database for drawing the 3D road object, and the creating unit creates the 3D road object by extending the cross-section data by a length specified by the length information (page 3, paragraph 49; paragraph 50, lines 1-8; paragraph 52, lines 1-14; page 5, paragraph 67; paragraph 68, lines 1-5; paragraph 72, lines 1-13). Senda does not teach the device, wherein the length information is link-length information. Sakamoto teaches a three-dimensional map display device, comprising extracting units that extract road object information comprising width and height information of a road object and length information extracted from a road network database, and further comprising a creating unit that creates the 3D road object based on the extracted information, wherein the length information is link-length information (page 8, paragraph 183, lines 3-6; paragraph 184, lines 4-10; page 9, paragraph 192, lines 1-5; page 10, paragraph 193, lines 1-9; page 12, paragraph 214; page 14, paragraph 258, lines 4-8; paragraph 260, 261, 265, and 268) . As taught by Sakamoto, utilizing this link-length information to construct the 3D road objects simplifies processing, reduces the amount of stored information, and increases the accuracy of the 3D representation. Therefore, it would have been obvious to a person having

ordinary skill in the art at the time the invention was made to combine the link-length information of Sakamoto with the invention disclosed by Senda.

Regarding claims 33 and 34, the limitations of these claims correspond to the limitations of claims 29 and 30, respectively; thus they are rejected on the same grounds as claims 29 and 30, respectively.

Regarding claims 37 and 38, the limitations of these claims correspond to the limitations of claims 29 and 30, respectively; thus they are rejected on the same grounds as claims 29 and 30, respectively.

Response to Arguments

9. Applicant's arguments filed September 21, 2009 have been fully considered but they are not persuasive.

On page 6 of the Applicant's Remarks, with respect to claim 27, the Applicant argues that Senda fails to teach the claimed subject matter because Senda merely teaches changing the height of the building polygon according to sound data, and Senda does not teach the extraction of cross-section data even if the base of the polygon is interpreted as a cross section. The Examiner respectfully disagrees with these arguments. Regarding the former argument, the Examiner respectfully submits that although Senda teaches that the height of the building polygons is reflective of the magnitude of the audio data, the manner in which Senda changes the height of the building polygons by longitudinally extending the cross-sections by an extracted length, as is illustrated in the above Office Action. Regarding the latter argument, the Examiner respectfully submits that Senda also clearly discloses that the cross-sectional data is extracted, as is further illustrated in the above Office Action.

The Applicant's remaining arguments have been fully considered, but are moot in view of the new ground(s) of rejection.

Conclusion

10. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Koizumi et al. (U.S. Patent No. 6,151,552); Route guidance apparatus.

Maruyama et al. (U.S. Patent Application Publication No. 2004/0236507); Car navigation system.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID T. WELCH whose telephone number is (571)270-5364. The examiner can normally be reached on Monday-Thursday, 8:00-5:30 EST, and alternate Fridays, 8:00-4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571)272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/dtw/

/XIAO M. WU/

Supervisory Patent Examiner, Art Unit 2628